

United States Patent and Trademark Office

A

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/025,183	12/19/2001	Jeffrey A. Von Arx	279.391US1	6387
21186	7590 01/13/2005		EXAM	INER
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402			MANUEL, GEORGE C	
			ART UNIT	PAPER NUMBER
	•		3762	
			DATE MAILED: 01/12/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applicati n No.	Applicant(s)			
		10/025,183	VON ARX ET AL.			
	Office Action Summary	Examin r	Art Unit			
		George Manuel	3762			
Period fo	Th MAILING DATE of this communication or Reply	appears on the cover sh t with t	h correspond nc address			
THE - Exte after - If the - If NC - Failt Any	ORTENED STATUTORY PERIOD FOR RE MAILING DATE OF THIS COMMUNICATIOnsions of time may be available under the provisions of 37 CFF SIX (6) MONTHS from the mailing date of this communication be period for reply specified above is less than thirty (30) days, a period for reply is specified above, the maximum statutory peure to reply within the set or extended period for reply will, by streply received by the Office later than three months after the med patent term adjustment. See 37 CFR 1.704(b).	N. R 1.136(a). In no event, however, may a reply reply within the statutory minimum of thirty (30 ricd will apply and will expire SIX (6) MONTHS atute, cause the application to become ABAND	be timely filed O) days will be considered timely. If from the mailing date of this communication. DONED (35 U.S.C. § 133).			
Status						
· 1)⊠	Responsive to communication(s) filed on <u>06 December 2004</u> .					
2a)⊠	This action is FINAL . 2b) ☐ This action is non-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the ments is					
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposit	ion of Claims					
4)🖂	Claim(s) <u>1-46</u> is/are pending in the application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)[Claim(s) is/are allowed.					
6)⊠	Claim(s) 1-42 and 46 is/are rejected.					
7)🖂	Claim(s) <u>43-45</u> is/are objected to.					
8)[Claim(s) are subject to restriction and/or election requirement.					
Applicat	ion Papers					
9) The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority	under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachmer	it(s)					
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 12/6/04. Paper No(s)/Mail Date 12/6/04. Paper No(s)/Mail Date 12/6/04. Paper No(s)/Mail Date 12/6/04.						

Application/Control Number: 10/025,183

Art Unit: 3762

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-3, 5, 8-40 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Barreras '397 (of record).

Applicant's claim 1 does not appear to limit the features of a far field antenna beyond the capabilities of antenna 11 disclosed in Barreras. The antenna 11 of Barreras is connected to the electronic circuit 44 and communicates to antennae 17 and 21.

Barreras discloses a near field antenna comprising inductor 30 and a far field antenna comprising internal antenna 11.

The examiner is interpreting an update command to comprise RF waves from coil 82 which are received by inductor 30.

Applicant's assertion that Barreras does not teach a duty cycle is without merit because the antenna 11 of Barreras clearly works according to a "duty cycle" with modulated and demodulated signals. A "duty cycle" is merely the ratio of "on" time to "total" time.

Variations in a modulated signal may extrapulate to convey information, but essentially represent a powering and unpowering of an antenna connected to a circuit.

Lahti et al '982 shows this:

Duty cycle as used herein defines the ratio of working time to total time for an intermittently operating device and is expressed as a percent. See col. 2, lines 59-62.

Data comprises factual information, especially information organized for analysis or used to reason or make decisions

Regarding claim 29, Barreras discloses a plurality of data receivers comprising antenna 11 and inductor 30, both of which receive information in the form of electromagnetic energy used to make a decision in circuits 44 and 18, respectively.

Regarding claim 36, transmitter electronic module 76 closes the channel after a predetermined period. See switch 72.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Application/Control Number: 10/025,183

Art Unit: 3762

(a) A patent may not be obtained though the invention is not identically disclosed or described as set

forth in section 102 of this title, if the differences between the subject matter sought to be patented and

Page 4

the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 4, 6, 7, 39, 40-42 and 46 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Barreras '397 (of record).

Regarding claims 4 and 7, one of ordinary skill in the art would have found it

obvious to modify the antenna 11 of Barreras to comprise the features of a dipole or a

circumferential antenna arrangement because these are two well-known antenna

configurations.

Regarding claim 6, one of ordinary skill in the art would have found it obvious to

incorporate the antenna as part of the therapy lead because the antenna needs to be

exposed external of a steel enclosure and the therapy lead readily accepts the antenna

without affecting the operability of the lead for stimulation or sensing and the lead must

likewise be placed external the steel implantable enclosure.

Cubley et al '902:

[0009]Antennas generally should not be placed inside a metal enclosure because

the enclosure will shield the antenna thereby precluding the antenna to transmit a

signal to the outside of the enclosure and precluding exterior-generated signals

from penetrating the enclosure to be received by the antenna.

Art Unit: 3762

Regarding claims 40-42 and 46, one of ordinary skill in the art would have found it obvious to provide near and far field acknowledge signals because it is well known in communication protocol to provide such acknowledgement so it can be understood data transmitted was received.

White et al '982:

The controller 78 can then communicate with the field unit 16 via the interrogation transmitter 74, antenna 76, antenna 42, and the RF data-modem receiver 40 to acknowledge receipt of the requested information.

Allowable Subject Matter

Claims 43-45 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

This is a continuation of applicant's earlier Application No. 10/025,183. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

Application/Control Number: 10/025,183 Page 6

Art Unit: 3762

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mass et al '045 disclose a far field radio frequency communications link for an implantable device.

Dettloff et al '628 disclose near, mid, and far field characteristic for antenna configurations usable in implantable devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Manuel whose telephone number is (703) 308-2118.

George Manuel Primary Examiner Art Unit: 3762

1/11/05